



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/847,942	05/02/2001	Eugene G. Joseph	56654US002	6169

7590

10/30/2003

3M INNOVATIVE PROPERTIES COMPANY
OFFICE OF INTELLECTUAL PROPERTY COUNSEL
P.O. BOX 33427
ST PAUL, MN 55133-3427

EXAMINER

THOMPSON, CAMIE S

ART UNIT	PAPER NUMBER
----------	--------------

1774

18

DATE MAILED: 10/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

CLO-18

Office Action Summary

Applicati n No.

09/847,942

Applicant(s)

JOSEPH ET AL.

Examiner

Camie S Thompson

Art Unit

1774

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20, 22-25 and 40-49 is/are pending in the application.
- 4a) Of the above claim(s) 50-54 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20, 22-25 and 40-49 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s) ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____. | 6) <input type="checkbox"/> Other: |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 8, 2003 has been entered.
2. Applicant's amendment and accompanying remarks filed August 19, 2003 have been acknowledged.
3. Examiner acknowledges amended claims 1, 2, 7, 8, 17, 18, 19 and 20.
4. Examiner acknowledges newly added claims 50-54. Original claims 1-20, 22-25 and 40-49 were directed towards a pressure sensitive adhesive fiber. Newly added claims 50-54 are directed towards a method for making a minimicrofibrous reinforced adhesive fiber.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 50-54 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142 (b) and MPEP 821.03. Applicant must file a division application or file a new application in order to prosecute the method for making a minimicrofibrous reinforced adhesive fiber.

Claim Objections

5. Claim 14 has an improper Markush group. The examiner suggests adding the phrase "the group consisting of" after the phrase "selected from isooctyl acrylate ...".

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

7. Claims 1-20, 22-25 and 40-45 and 47-49 are rejected under 35 U.S.C. 102(e) as being anticipated by Riedel et al., U.S. Patent Number 6,133,173.

The Riedel reference discloses a nonwoven cohesive wrap that can be used as a protective underwrap, medical tape or athletic tape which comprises pressure-sensitive adhesive fibers and a non-pressure sensitive material that comprises conjugate fibers of different polymers or blends

Art Unit: 1774

as per instant claims 1, 17, 20, 22-23, 25, 40-41, 43-45, 47 and 49 (see abstract, column 1, lines 32-column 2, line 68 and column 3, lines 1-8). Riedel also discloses that the nonwoven wrap has a basis weight from 40 to 200 g/m², an elongation break from 100 to 900 percent, tensile strength of at least 40 –260 grams/cm and at least 150% of the load at yield point as per instant claims 1, 3-5, 15, 17, 19-20, 22-23, 25, 40-41, 43 and 48 (see column 2, lines 24-25; claims 1,2 and 9-14 and Table 1, column 14). The reference also discloses that the polymeric conjugate fibers are substantially continuous microfibers that have a diameter generally less than 25 microns as per instant claims 1, 2 and 7 (see column 2, lines 48-50 and column 3, lines 16-19). The non-pressure-sensitive adhesive material in fibrous form is disclosed in the reference as comprising 5 to 95 percent of the basis weight of the fibers as per instant claim 6 (see column 9, lines 26-52). Riedel discloses using suitable pressure-sensitive adhesives that include polyalphaolefin, rubber resin adhesives and acrylate adhesives wherein the acrylate polymer is crosslinked and comprises copolymerized monomers comprising at least one monofunctional free-radically copolymer reinforcing monomer having a homopolymer glass transition temperature higher than that of the alkyl (methyl)acrylate monomer as per instant claims 9-11,13-14,19, 24 and 42 (see column 4, lines 35-38; column 5, lines 31-55 and column 6, lines 16- column 7, line 26). A vinyl group such as styrene is disclosed in the reference as a suitable crosslinking agent as per instant claim 12 (see column 7, lines 35-54). The Riedel reference discloses that the non pressure-sensitive adhesive fibrous material comprises an elastomer and has a force of about 7.5-10 Mpa as per instant claims 15 and 20 (see column 9, lines 53-column 10, line 3). Suitable non-adhesive materials for use in forming conjugate fibers, for use in blends with the pressure-sensitive adhesive or for use as separate fibers are disclosed in the Riedel reference and include

Art Unit: 1774

elastomeric materials that include metallocene-type polyethylene copolymers as per instant claim 17 (see column 8, lines 67-column 9, line 25). The conjugate microfibers can be present in the form of two or more layered fibers, sheath-core fiber arrangement or "island in the sea" type fiber structures as per instant claim 18 (see column 3, lines 3-8). The microfibers of Riedel meet the applicant's definition of minimicrofibers as being microfibers made out of more than one fiber.

8. Claims 1 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hicks, Jr. U.S. Patent Number 4,659,923 in view of Riedel et al., U.S. Patent Number 6,133,173.

The Hicks reference discloses a medical sensor that uses fiber optics comprising of pressure-sensitive adhesive fibers as per instant claim 46 (see abstract, column 3, lines 10-12, column 7, lines 55-59 and column 8, lines 9-10). Hicks does not disclose the components of the pressure sensitive adhesive fibers as per instant claim 1. Riedel does teach a nonwoven cohesive wrap that can be used as a protective underwrap, medical tape or athletic tape which comprises pressure-sensitive adhesive fibers and a non-pressure sensitive material that comprises conjugate microfibers of different polymers or blends. The microfibers of Riedel meet the applicant's definition of minimicrofibers as being microfibers made out of more than one fiber.

It would have been obvious to use the pressure-sensitive adhesive fibers of the Riedel patent in order to obtain a medical device that allows for the core of the device to be subjected to lateral tension forces (see Hicks, Jr. column 8, lines 16-17).

Response to Arguments

9. Applicant's arguments filed August 18, 2003 have been fully considered but they are not persuasive. Applicant argues that the Riedel reference does not teach or suggest a pressure sensitive adhesive fiber that includes a pressure sensitive adhesive component; and an organic polymeric reinforcing material comprising a plurality of substantially continuous minimicrofibers having a diameter of no greater than about 10 microns within the pressure sensitive adhesive component with the requirements of instant claim 1. The Riedel reference meets all the limitations of claim 1. The abstract, column 1, lines 32-column 2, line 68 and column 3, lines 1-8 of the Riedel reference discloses a nonwoven cohesive wrap that can be used as a protective underwrap, medical tape or athletic tape which comprises pressure-sensitive adhesive fibers and a non-pressure sensitive material that comprises conjugate fibers of different polymers or blends. Also, Riedel discloses the basis weight, the elongation break, tensile strength, the load at yield point that reads on the instant claims in column 2, Table 1 and reference claims 1-2 and 9-14. Additionally, Riedel discloses that the diameter of the minimicrofibers is less than 50 microns which encompasses being less than 10 microns. Applicant claims that the instant diameter of the fibers is no greater than about 10 microns. The language "no greater than about 10 microns" includes data points greater than 10 as there is no requisite value for the term "about". The Riedel reference meets all the limitations of instant claims 1-20, 22-25 and 40-45 and 47-49.

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Camie S. Thompson whose telephone number is (703) 305-4488. The examiner can normally be reached on Monday through Friday from 7:30 am to 4:00 pm. If

Art Unit: 1774

attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly, can be reached at (703) 308-0449. The fax phone numbers for the Group are (703) 872-9310 {before finals} and (703) 872-9311 {after finals}.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661.

CYNTHIA H. KELLY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700

Cynthia H. Kelly